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(54) Title: MULTI-COMPONENT VACCINE COMPRISING AT LEAST THREE ANTIGENS TO PROTECT AGAINST DISEASE CAUSED BY *HAEMOPHILUS INFLUENZAE*

(57) Abstract: A multi-component immunogenic composition confers protection on an immunized host against infection caused by *Haemophilus influenzae*. Such composition comprises at least three different antigens of *Haemophilus influenzae*, two of which are adhesins. High molecular weight (HMW) proteins and *Haemophilus influenzae* adhesin (Hia) proteins of non-typeable *Haemophilus influenzae* comprise the adhesin components while the other antigen is a non-proteolytic analog of Hia47 protein. Each component does not impair the immunogenicity of the others. The *Haemophilus* vaccine may be combined with DTP component vaccines, which may contain inactivated poliovirus, including type 1, type 2 and/or type 3, and/or a conjugate of a capsular polysaccharide of *Haemophilus influenzae* and tetanus or diphtheria toxoid, including PRP-T, to provide a multi-valent component vaccine without impairment of the immunogenic properties of the other antigens.

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INTERNATIONAL SEARCH REPORT

International Application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K39/102 A61K39/116 A61K39/295 A61P31/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, PAJ, WPI Data, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A <div>cited</div>	<p>BARENKAMP STEPHEN J ET AL: "Identification of a second family of high-molecular-weight adhesion proteins expressed by non-typable Haemophilus influenzae." MOLECULAR MICROBIOLOGY, vol. 19, no. 6, 1996, pages 1215-1223, XP000946619 ISSN: 0950-382X cited in the application page 1215, column 2, paragraph 1 page 1220, column 2 -page 1221, column 1, paragraph 1</p> <p style="text-align: center;">--- -/-</p>	1-4, 7-9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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S document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Internat Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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